A check in the amount of $920.00 in payment of the extension fee is enclosed. Please charge any additional fee and credit any overpayment to our Deposit Account 06-1205.

In response to the outstanding Final Action dated December 21, 2001 and the Advisory Action dated May 20, 2002 (Paper No. 15), please amend the above-identified application as follows pursuant to 37 C.F.R. § 1.116:

IN THE SUBSTITUTE SPECIFICATION:

The paragraph beginning at page 15, line 22 and ending on page 15, line 31 has been amended as follows:

In case of forming a film of a Si-containing semiconductor such as a-Si, poly-Si or SiC, the Si-containing raw material to be introduced through the processing gas introduction means can be a substance in the gaseous state at normal temperature and normal pressure or an easily gasifiable substance, for example an inorganic silane such as SiH_4 or [Si_2 H_6] $\underline{Si_2H_6}$, an organic silane such as tetraethylsilane (TES), tetramethylsilane (TMS) or dimethylsilane (DMS), or a halosilane such as SiF_4, Si_2F_6, $SiHF_3$, SiH_2F_2, $SiCl_4$, Si_2Cl_6, $SiHCl_3$, SiH_2Cl_2, SiH_3Cl or $SiCl_2F_2$. In such case, the plasma generating gas to be introduced through the plasma generating gas introduction means can be, for example, H_2, ~~He, Ne, Ar, Kr, Xe or Rn.~~

The paragraph beginning at page 16, line 1 and ending on page 16, line 10 has been amended as follows:

In case of forming a film of a Si-compound such as Si_3N_4 or SiO_2, the Si-containing raw material to be introduced through the processing gas introduction means can be a substance in the gaseous state at normal temperature and normal pressure or an easily gasifiable substance, for example an inorganic silane such as SiH_4 or Si_2H_6, an organic silane such as tetraethoxysilane (TEOS), tetramethoxysilane (TMOS) or octamethylcyclotetrasilane (OMCTS), or a halosilane such as SiF_4, Si_2F_6, $SiHF_3$, SiH_2F_2, $SiCl_4$, Si_2Cl_6, $SiHCl_3$, SiH_2Cl_2, SiH_3Cl or $SiCl_2F_2$. In such case, the raw material to be introduced through the plasma generating gas introduction means can be, for example, N_2, NH_3, N_2H_4, hexamethyldisilazane (HMDS), O_2, O_3, [H_2O] $\underline{H_2O}$, NO, [N_2O] $\underline{N_2O}$ or NO_2.

The paragraph beginning at page 16, line 20 and ending on page 16, line 29 has been amended as follows:

In case of forming a metal compound film such as [of] Al_2O_3, AlN, Ta_2O_5, TiO_2, TiN or WO_3, the metal-containing raw material to be introduced through the processing gas introduction means can be an organometallic compound such as trimethyl aluminum (TMAl), triethyl aluminum (TEAl), triisobutyl aluminum (TIBAl), dimethylaluminum hydride (DMAlH), tungsten carbonyl ($W(CO)_6$), molybdenum carbonyl ($Mo(CO)_6$), trimethyl gallium (TMGa) or triethyl gallium (TEGa), or a metal halide such as $AlCl_3$, WF_6, $TiCl_3$ or $TaCl_5$. In such case, the raw material gas to be introduced through the plasma generating gas introduction means can be, for example, O_2, O_3, H_2O, NO, [N_2O] $\underline{N_2O}$, NO_2, N_2, NH_3, [N_2H_4] $\underline{N_2H_4}$ or hexamethyldisilazane (HMDS).

The paragraph beginning at page 17, line 6 and ending on page 17, line 14 has been amended as follows:

In case of surface oxidation of the processed substrate, the oxidizing gas to be introduced through the plasma generating gas introduction means can be, for example, O_2, O_3, H_2O, NO, [N_2 O] $\underline{N_2O}$ or NO_2. Also in case of surface nitriding of the substrate, the nitriding gas to be introduced through the plasma generating gas introduction means can be, for example, N_2, NH_3, [N_2 H_4] $\underline{N_2H_4}$ or hexamethyldisilazane (HMDS). In such case, because the film formation is not conducted, [any] processing gas is not introduced through the processing gas introduction means, or the same gas as that introduced through the plasma generating gas introduction means is also introduced through the processing gas introduction means.

The paragraph beginning at page 22, line 27 and ending on page 23, line 14 has been amended as follows:

The annular wave guide tube 103 has a cross-sectional internal dimension of 27×97 mm, same as that of the WRT-2 standard wave guide tube, and has a central diameter of 354 mm. The annular wave guide tube 103 is composed of stainless steel, for maintaining the mechanical strength, and the internal wall is provided with two-layered platings with copper and then with silver, in order to suppress the microwave propagation loss. The interior of the annular wave guide tube 103 is filled with quartz, constituting the second dielectric material [103] 704. The annular wave guide tube 103 is provided with slots for introducing the microwave into the plasma generation chamber 101. The slots have a rectangular shape with a length of 21 mm and a width of 2 mm, and are provided at

an interval of 1/4 of the guide wavelength. The guide wavelength depends on the frequency of the microwave used, the dielectric constant of the second dielectric material and the cross-sectional dimension of the wave guide tube and is about 80 mm in case of using a microwave of a frequency of 2.45 GHz, quartz as the second dielectric material and the wave guide tube of the above-mentioned dimension. The annular wave guide tube 103 employed in the present embodiment had 56 slots formed at an interval of about 20 mm. To the annular wave guide tube 103, there are connected in succession a 4E tuner, a directional coupler, an isolator and a 2.45 GHz microwave source (not shown).

The paragraph beginning at page 23, line 15 and ending on page 23, line 30 has been amended as follows:

The generation of plasma and the processing therewith are carried out in the following manner. The interior of the plasma generation chamber 101 and the processing chamber 111 is evacuated by a vacuum system (not shown). Then a plasma generating gas is introduced, through a gas inlet 105, into the plasma generation chamber 101 at a predetermined flow rate. Then a conductance valve (not shown) provided in the vacuum system (not shown) is so adjusted as to maintain the interior of the plasma generation chamber 101 and the processing chamber 111 at a predetermined pressure. A desired electric power is supplied from a microwave source (not shown), through the annular wave guide tube 103 filled with the second dielectric material [104] 704 and through the first dielectric material 102, into the plasma generation chamber 101, thereby generating plasma therein. A processing gas, introduced into the processing chamber 111 through the